



High Performance Computing Software

JPL Internal Seminar Series

Improving Cluster Network Performance via Software Design

Dr. Charles D. Norton

Thursday, November 14, 2002

12:00 noon – 1:00 p.m.

Building 126, Room 225

Parallel applications that exhibit adaptive behavior often have severe message passing requirements that negatively impact performance; particularly on cluster architectures. One way to resolve this issue is to acquire high performance networks, but the architecture of cut-through switches combined with embedded routing algorithms does not mean that good performance comes automatically. In this meeting, we will see examples of how modifications to program message passing design can dramatically improve the performance of such networks on cluster computers.

For questions, please contact Hans Zima at 4-8980.